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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/578,638

05/09/2006

Hiroki Kaihori

MAT-8849US

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52473

7590

05/27/2009

RATNERPRESTIA

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EXAMINER

WILLIAMS, JEFFERY L

ART UNIT

PAPER NUMBER

2437

MAIL DATE

DELIVERY MODE

05/27/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/578,638	Applicant(s) KAIHORI, HIROKI	
	Examiner JEFFERY WILLIAMS	Art Unit 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1 – 24 are pending.

Specification

The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required:

The specification fails to provide proper antecedent basis for the recitations of “authenticate each other at least in part by: (1) ...”, “encrypted data based in part on ...”, “the second data processor further stores, into the third storage and the fourth storage”. The examiner notes that the applicant fails to disclose authentication "at least in part" and encryption "based in part". Furthermore, the examiner notes that the specification does not appear to disclose that the second data processor further stores “into the third storage and the fourth storage...”

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1 – 24 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where the new recitations are supported, nor does there appear to be a written description of the claim limitations in the application as filed (see above objection to the specification).

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1 – 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claims 1 – 24, the examiner again respectfully notes that they comprise numerous issues rendering the meaning of the claims unclear.

For example, claims 1 - 4 recites "*authenticate each other at least in part by*" and "encrypted data based in part on..." The examiner notes that there appears to be no standard meaning to one of ordinary skill in the art for authentication "at least in part by" and encryption "based in part on". Furthermore, the applicant fails to disclose a means for interpreting such recitations within the applicant's specification.

For example, claim 1 recites that a second data processor stores data into both third storage and fourth storage (lines 30, 31). Thus, the applicant establishes antecedent basis for data stored within two storage locations. However, the applicant further references "the stored one of the first data...and second data..." in lines 33, 34, thus failing to clearly identify which of the stored data is being referenced.

For example, claim 2 recites in line 12, "the second data processor". This recitation lacks antecedent basis, and the examiner presumes the applicant to recite "a data processor".

For example, the examiner notes that claim 2 appears to illogically recite that "second data for mutual authentication" is both optional (e.g. line 9) and required (e.g. line 11) within the claim.

For example, lines 8 and 14 of claim 5 recites "the second accumulation data" within the recitation "*or the second data processor generates and stores into the third storage the second accumulation data*". However, it is noted that applicant's reference to "the second accumulation data" appears improper as the accumulation data being referenced appears to be data generated by the second data processor and not the accumulation data generated by the first data processor. For the purpose of examination, the examiner presumes the applicant to recite "second accumulation data".

Claims 2 – 4, and 6 – 24 comprise the same or similar issues and the applicant is respectfully encouraged to correct all such deficiencies so as to render the scope of the claims clear.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 – 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuji et al. (Tsuji), “Remote Control System”, U.S. Patent Publication 2004/0056776 in view of Hisada et al. (Hisada), U.S. Patent 6,043,752.

Regarding claim 1, as best understood by the examiner, it is noted that Tsuji discloses:

an immobilizer unit including: a first data processor; a first communication part connected with the first data processor; a first antenna connected with the first communication part; a first storage connected with the first data processor (Tsuji, fig. 1:2, see also fig. 1:1),

the first storage preliminarily storing first data for mutual authentication (Tsuji, fig. 11, par. 88); and a second storage connected with the first data processor (Tsuji, fig. 11 – herein Tsuji discloses a plurality of locations for storage (“storage”));

and a portable unit including: a second data processor; a second communication part connected with the second data processor; a second antenna connected with the second communication part; and a third storage connected with the second data processor (fig. 1:1, see also fig. 1:2),

the third storage preliminarily storing the first data for mutual authentication (Tsuji, fig. 11);

and a fourth storage connected with the second data processor, the fourth storage preliminarily storing second data for mutual authentication different from the first data for mutual authentication (Tsuji, fig. 11);

wherein:

the immobilizer unit further includes an information reception part connected with the first data processor (Tsuji, fig. 1:11, 21), and when a first instruction is fed into the information reception part (Tsuji, fig. 1:11, 21 – computing devices operate according to instructions)

Tsuji discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (Tsuji, par. 84, 92). Tsuji discloses *the first data processor and the second data processor authenticate each other at least in part by: (1) the first data processor transmitting via the first antenna an ... data based in part on the first data for mutual authentication stored in the first storage and (2) the second data processor receiving via the second antenna ... the ... data* (Tsuji, par. 84,88,90). However, Tsuji does appear to disclose that data transmitted from the first data processor is encrypted.

Hisada also discloses a vehicle security system wherein two communicating units comprise means for conducting bi-directional communication (e.g. Hisada, fig. 10, 11). Hisada discloses that the communications between the units should be encrypted (Hisada, 4:17-28; 16:48-55). This bi-directional communication does not disclose that the,

It would have been obvious to one of ordinary skill in the art to employ encryption and decryption of transmitted and received data within the security system of Tsuji because one of ordinary skill in the art would have been motivated by the teachings for improving security (Hisada, 16:48-55).

and the second data processor further stores, into the third storage and the fourth storage, one of the first data for mutual authentication and the second data for mutual authentication, and transmits the stored one of the first data for mutual authentication and the second data for mutual authentication via the second antenna, and the first data processor further stores, into the second storage, the one of the first data for mutual authentication and the second data for mutual authentication received via the first antenna (Tsuji, par. 43, 44, 49, 53).

Regarding claim 4, as best understood by the examiner, it is rejected, at least, for the same reasons as claim 1, and furthermore because, the combination enables:

and the first data processor further generates, stores into the second storage, and transmits via the first antenna, one of data identical to the first data for mutual authentication and second data for mutual authentication different from the first data for mutual authentication (Tsuji, par. 84, lines 1-6, fig. 10:33), and the second data

processor stores, into the third storage, the one of the first data for mutual authentication and the second data for mutual authentication received via the second antenna, the second data being received from the second data processor and stored in the second storage (Tsuji, par. 84, lines 6-10).

Regarding claim 5, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, either the first data processor generates and stores into the second storage first accumulation data different from the second data for mutual authentication, or the second data processor generates and stores into the third storage the first accumulation data; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 6, as best understood by the examiner, it is noted that the limitations are not required by the claims (e.g. see recitations “*when both...*”). However, the examiner points out that the combination enables:

wherein, upon input of a second instruction into the information reception part, when both of data stored in the second storage and the third storage are the second data for mutual authentication, the first data processor transmits the first data for mutual authentication stored in the first storage via the first antenna, and the second data processor stores, into the third storage, the first data for mutual authentication received via the second antenna; and when both of data stored in the second storage and the third storage are identical to the first data for mutual authentication, either the first data processor generates and stores into the second storage, second accumulation data different from the first data for mutual authentication, or the second data processor generates and stores into the third storage the second accumulation data (Tsuji, par. 89).

Regarding claim 7, as best understood by the examiner, it is noted that the combination enables:

wherein the portable unit further has a fifth storage preliminarily storing an ID code, and the first data processor and the second data processor authenticate each other also using the ID code (par. 84 – herein, Tsuji discloses receiving a signal comprising an ID code. The ID code is subsequently held for processing and performing operations using the code, thus requiring a means of storage).

Regarding claim 8, as best understood by the examiner, it is noted that the combination enables:

wherein the immobilizer unit further has a sixth storage, the second data processor transmits, via the second antenna, the ID code stored in the fifth storage, and the first data processor stores, into the sixth storage, the ID code received via the first antenna (Tsuji, par. 84, fig. 10:33).

Regarding claim 9, as best understood by the examiner, it is noted that the combination enables:

wherein upon input of a second instruction into the information reception part, the first data processor generates third accumulation data different from the ID code stored in the sixth storage, and stores the third accumulation data into the sixth storage (Tsuji, fig. 11; par. 43).

Regarding claims 2, 3, and 10 – 24, they comprise essentially similar recitations as claim 1 - 9, and they are rejected, at least, for the same reasons.

Response to Arguments

Applicant's arguments with respect to claims 1 - 24 have been considered but are moot in view of the new ground(s) of rejection.

Furthermore, the examiner respectfully notes that the applicant is mistaken regarding the assertions that the units of Tsuji are not capable of bi-directional communication. Tsuji clearly shows that units are capable of bi-directional communication (Tsuji, par. 84, 92).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

See Notice of References Cited.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEFFERY WILLIAMS whose telephone number is (571)272-7965. The examiner can normally be reached on 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeffery Williams/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437

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